DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005854 Address: 333 Burma Road **Date Inspected:** 20-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1830 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No N/A **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** SAS tower

Summary of Items Observed:

Bay #10 South and North Tower Shop

North Tower Lift #1:-Caltrans QA Inspector observed five welders performed FCAW build up weld metal welding on stiffeners which located at exterior bottom tower of skin plate C and D. The buildup metal welding has been approved by Caltrans with file #CWR-00087. The metal buildup on skin plate C is 50mm to 60mm thick and skin plate D is 25mm to 30mm thick. Total 2 inner stiffeners have been completed on skin plate D and 3 inner stiffeners have been completed on skin plate C.

South Tower Lift #2:-Caltrans QA Inspector observed five welders performed carbon arc gouging process on inner corner longitudinal seam weld that connected skin plate C and D. The gouging purpose is removed the indications that rejected by ZPMC UT test. The gouging weld area located at elevation 53m, 56m, 68m, 71m and 80.75m section. Base on Caltrans observation, no discrepancies were noted.

Bay #11 East and West Tower Shop

West Tower Lift #2:- Caltrans QA Inspector observed six ZPMC welders in process fit up and SMAW tack welding on skin plate C of west tower lift 2. A numerous temporary tack welds have been welded attach to the skin plate B and skin plate A after the skin plate B has been secured. Base on Caltrans observation, no discrepancies were noted.

East Tower Lift #2:- Caltrans QA inspector observed two ZPMC welding operators performed semi-automatic SAW on outer corner longitudinal seam weld # ESD1-TL7B/L-5A that connected skin plate A and skin plate B of east tower lift #2. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The minimum preheat and maximum interpass temperature requirements for SAW longitudinal seam weld are 110C degree and 230 C degree. The semi-automatic SAW was monitored and recorded by ZPMC and ABF QC

WELDING INSPECTION REPORT

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inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer